

ORAM 10

20-21 March 2021

Scientific Program

Virtual on Zoom
hosted by
the University of Cincinnati and the University of Kentucky

Zoom Links

Introduction	P. Hislop	Meeting ID: 899 6641 2711
		Passcode: 630589
Virtual happy hour	P. Hislop	Meeting ID: 899 6641 2711
		Passcode: 630589
Session I	M. Tohaneanu	Meeting ID: 899 6641 2711
		Passcode: 630589
Session II	F. Chung	Meeting ID: 826 6861 8146
		Passcode: ORAM
Session III	M. Goldberg	Meeting ID: 956 9105 2164
		Passcode: 734416
Session IV	G. Speight	Meeting ID: 972 1066 8700
		Passcode: 405420

Zoom Links

Parallel session 1A	L. Slavin	Meeting ID: 939 5054 5871
		Passcode: 124766
Parallel session 1B	F. Chung	Meeting ID: 826 6861 8146
		Passcode: ORAM
Parallel session 1C	M. Goldberg	Meeting ID: 956 9105 2164
		Passcode: 734416
Parallel session 1D	M. Tohaneanu	Meeting ID 810 9689 0046
		Passcode: 186775
Parallel session 2A	G. Speight	Meeting ID: 972 1066 8700
		Passcode: 405420
Parallel session 2B	P. Hislop	Meeting ID: 899 6641 2711
		Passcode: 630589
Parallel session 2C	L. Slavin	Meeting ID: 939 5054 5871
		Passcode: 124766
Parallel session 2D	M. Tohaneanu	ID 859 3841 8741
		Passcode: 297325
Parallel session 3A	F. Chung	Meeting ID: 840 2744 7113
		Passcode: ORAM
Parallel session 3B	L. Slavin	Meeting ID: 939 5054 5871
		Passcode: 124766
Parallel session 3C	M. Goldberg	Meeting ID: 956 9105 2164
		Passcode: 734416
Parallel session 3D	P. Hislop	Meeting ID: 899 6641 2711
		Passcode: 630589

Saturday, 20 March 2021

All times are Eastern Daylight Time

1. Saturday Morning Sessions

9:45 AM	Opening and welcome	P. Hislop
	Session I	
	Chair	M. Tohaneanu
10:00 AM	Jason Metcalfe , University of North Carolina, Chapel Hill <i>Local energy in the presence of degenerate trapping</i>	
11:30 AM	Parallel Session 1A: Chair	L. Slavin
	Parallel Session 1B: Chair	F. Chung
	Parallel Session 1C: Chair	M. Goldberg
	Parallel Session 1D: Chair	M. Tohaneanu

2. Parallel session 1A

11:30 AM–11:50 AM	C. Biswas, Indian Institute of Science <i>Sharp Fourier restriction estimates onto curves</i>
12:00 PM–12:20 PM	D. Stolyarov, St. Petersburg State University <i>Hardy–Littlewood–Sobolev inequality for $p = 1$</i>

3. Parallel session 1B

11:30 AM–11:50 AM	L. Gauthier, University of Kentucky <i>A Perturbed Polyharmonic Inverse Problem</i>
12:00 PM–12:20 PM	L. Yan , University of California Irvine <i>Inverse boundary problems for biharmonic operators in transversally anisotropic geometries</i>

4. Parallel session 1C

11:30 AM–11:50 AM J. Flynn, University of Connecticut
*Sharp Caffarelli-Kohn-Nirenberg Inequalities
for Grushin Vector Fields and Iwasawa Groups*

12:00 PM–12:20 PM J. Stanfill, Baylor University
A refinement of Hardy's inequality

5. Parallel session 1D

11:30 AM–11:50 AM D. Bilman, University of Cincinnati
Far-Field Asymptotics of High-Order Rogue Waves

12:00 PM–12:20 PM S-Z. Looi, University of Kentucky
*Pointwise decay for the energy-critical nonlinear wave equation
on perturbations of Minkowski spacetime*

6. Saturday Afternoon Sessions

Session II: Chair

F. Chung

2:00 PM **Katya Krupchyk**, University of California, Irvine
Inverse boundary problems for elliptic PDE

3:30 PM Parallel session 2A: Chair

G. Speight

Parallel Session 2B: Chair

P. Hislop

Parallel Session 2C: Chair

L. Slavin

Parallel Session 2D: Chair

M. Tohaneanu

5:30 PM Virtual Happy Hour

7. Parallel session 2A

3:30 PM–3:50 PM M. Capolli, University of Trento
A C^m Lusin Approximation Theorem in the Heisenberg Group

4:00 PM–4:20PM G. Bensten, University of Wisconsin Madison
Averages over Curves in the Heisenberg Group

4:30 PM–4:50 PM S. Zimmerman, OSU Marion
Singular integrals on regular, smooth curves in Carnot groups and Banach duals

8. Parallel session 2B

- 3:30 PM–3:50 PM W. Hamilton, University of North Carolina Chapel Hill
Consistency of spectral flows on graphs
- 4:00 PM–4:20 PM M. Pechmann, University of Tennessee Knoxville
On a condition for type-I Bose-Einstein condensation in random potentials in d dimensions
- 4:30 PM–4:50 PM S. Herschenfeld, University of Kentucky
A Simplified Proof of a continuum Minami Estimate
- 5:00 PM–5:20 PM B. Keeler, University of North Carolina Chapel Hill
Two-Point Weyl Laws and Monochromatic Random Waves

9. Parallel session 2C

- 3:30 PM–3:50 PM A. Osekowski, University of Warsaw
Fefferman's inequality and its offspring
- 4:00 PM–4:20 PM B. Sweeting, University of Cincinnati
On the John-Nirenberg Constant of BMO^p , $0 < p < 1$
- 4:30 PM–4:50 PM J. Denson, University of Wisconsin Madison
Salem Sets Avoiding Nonlinear Patterns
- 5:00 PM–5:20 PM A. Nastas, SUNY Albany
An inequality bound improvement and some proofs related to a theorem by Malliavin

10. Parallel session 2D

- 3:30 PM–3:50 PM J. Miller, University of Texas Austin
Derivation of Boltzmann's Equation for Mixtures
- 4:00 PM–4:20 PM M. M. Rahman, Texas Tech University
Regularity criteria for the two and three dimensional Kuramoto-Sivashinsky equation
- 4:30 PM–4:50 PM W. Park, Michigan State University
Bubbling and Neck analysis of harmonic maps
- 5:00 PM–5:20 PM R. Karki, Indiana University East
An approach for recovering initial temperature via bounded linear time sampling

Sunday, 21 March 2021

All times are Eastern Daylight Time

- Session III:** Chair M. Goldberg
- 10:00 AM **Natasa Pavlovic**, University of Texas, Austin
Beyond binary interactions of particles
- 11:30 AM Parallel session 3A: Chair F. Chung
- Parallel session 3B: Chair L. Slavin
- Parallel Session 3C: Chair M. Goldberg
- Parallel Session 3D: Chair P. Hislop
- Session IV:** Chair G. Speight
- 1:00 PM **Mario Bonk**, University of California, Los Angeles
Quasiregular maps and non-linear potential theory
- 2:00 PM END of CONFERENCE

11. Parallel session 3A

- 11:30 AM–11:50 AM A. Remond-Tiedrez , University of Wisconsin Madison
Instability of an Anisotropic Micropolar Fluid
- 12:00 PM–12:20 PM O. Misiats , Virginia Commonwealth University
Singular perturbation of an elastic energy with a singular weight

12. Parallel session 3B

- 11:30 AM–11:50 AM P. Zatitskii, St. Petersburg State University
Distribution of martingales with bounded square functions
- 12:00 PM–12:20 PM V. Vasyunin, St. Petersburg State University
Sharp multiplicative inequalities with BMO

13. Parallel session 3C

- 11:30 AM–11:50 AM A. Stokolos, Georgia Southern University
On a size of univalent and typically real in the unit disc polynomials
- 12:00 PM –12:20 PM V. Vellis, University of Tennessee Knoxville
Geometry of Quasiconformal trees

14. Parallel session 3D

- 11:30 AM–11:50 AM M. Alexis , University of Wisconsin Madison
The Steklov problem for the Orthogonal Polynomials on the Unit Circle, orthogonal with respect to a Muckenhoupt weight
- 12:00 PM–12:20 PM J. Shapiro , University of Dayton
Semiclassical resolvent estimates for long range Lipschitz potentials